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**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Examine The  
Commission's post-2005 Energy Efficiency  
Policies, Programs, Evaluation Measurement and  
Verification, and Related Issues.

R.06-04-010  
(Filed April 13, 2006)

**ADMINISTRATIVE LAW JUDGE'S RULING ADDRESSING COMPLIANCE  
FILINGS PURSUANT TO DECISION 06-06-063**

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## **ADMINISTRATIVE LAW JUDGE'S RULING ADDRESSING COMPLIANCE FILINGS PURSUANT TO DECISION 06-06-063**

### **1. Background and Summary**

By Decision (D.) 05-04-024 in Rulemaking (R.) 04-04-025, the Commission adopted an avoided cost methodology for the purpose of evaluating the 2006-2008 energy efficiency portfolio plans of Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company (SoCalGas), collectively referred to as “the utilities.”<sup>1</sup> In D. 06-06-063, the Commission refined those avoided costs and addressed other issues related to the calculation of energy efficiency cost-effectiveness.

In particular, the Commission addressed certain anomalies in the “E3 calculators” used by the utilities to calculate program and portfolio cost-effectiveness for their energy efficiency activities.<sup>2</sup> One of those anomalies related to the manner in which the E3 calculators treated costs in the calculation of the Standard Practice Manual (SPM) tests of cost-effectiveness. As discussed in that decision, the SPM contains the Commission’s methodology for evaluating energy efficiency investments.

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<sup>1</sup> Avoided costs refers to the incremental costs avoided by the investor-owned utility when it purchases power from qualifying facilities, implements demand-side management, such as energy efficiency or demand-response programs, or otherwise defers or avoids generation from existing/new utility supply-side investments or energy purchases in the market. Avoided costs also encompass the deferral or avoidance of transmission and distribution-related costs.

<sup>2</sup> The E3 calculator is a model developed by Energy and Environmental Economics (or “E3”) for use by the utilities to map Commission-adopted avoided costs to energy efficiency programs for cost-effectiveness calculations.

In D.06-06-063, the Commission recognized that proper inputting of costs and benefits in the SPM tests of cost-effectiveness is critical to program planning and evaluation. In addition, per D.05-04-051, the performance basis for the risk/reward incentive mechanism being developed in this proceeding will be based on the SPM tests of cost-effectiveness for the majority of energy efficiency activities. Therefore, the Commission explored the SPM test anomalies observed in the E3 calculator in some detail in D.06-06-063, and provided direction on how to correct them. Attachment 1 to this ruling presents the relevant portions from D.06-06-063 on this issue.

Ordering Paragraph 6 of D.06-06-063 required the utilities and staff to jointly report back on the use of a common tool for reporting purposes that would apply the SPM tests of cost-effectiveness consistent with the directives in that decision. On October 16, 2006, the utilities and staff filed their recommendation. They recommend that the E3 calculator be used for reporting benefit/cost information in the utilities' quarterly reports on energy efficiency accomplishments (Quarterly Reports), which include total resource cost (TRC) and program administrator cost (PAC) tests of cost-effectiveness calculated on a cumulative-to-date basis for the portfolio as a whole.<sup>3</sup> There was also agreement among staff and the utilities that report results could be generated either by aggregating results from multiple E3 calculator output files, or by aggregating individual E3 calculator input files together prior to processing through the E3

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<sup>3</sup> See Administrative Law Judge's Ruling on Reporting Requirements, February 21, 2006 in R.01-08-028, Attachment A, p. A-5.

calculator “engine.”<sup>4</sup> By today’s ruling, I approve the use of the E3 calculator as the common tool for producing the benefit/cost metrics required under the adopted reporting protocols, subject to the further direction on treatment of costs, application of net-to-gross ratios and documentation discussed in this ruling.<sup>5</sup>

Ordering Paragraph 17 of D.06-06-063 required the utilities (and their contractors) to present the revised E3 calculators, including all inputs, to their program advisory and peer review groups for review in joint statewide public meetings and to submit final E3 calculator and input revisions in compliance with D.06-06-063 by September 8, 2006. Ordering Paragraph 17 also provided parties to this proceeding the opportunity to comment on the utilities’ compliance submittals by September 22, 2006, with reply comments due by September 29, 2006. Finally, Ordering Paragraph 17 directed the following:

After considering written comments, and in consultation with Joint Staff, the assigned ALJ in R.06-04-010 shall address the compliance submittal by ruling, or take other steps as necessary to ensure compliance with today’s decision.

The Division of Ratepayer Advocates and The Utility Reform Network (DRA/TURN) filed joint comments on the utilities’ compliance submittals, and

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<sup>4</sup> The Utilities and Joint Staff’s Report on the Common Approach and Tool That Applies the Standard Practice Manual Cost-Effectiveness Tests Pursuant to Ordering Paragraph 6 of D.06-06-003, October 16, 2006, p. 2.

<sup>5</sup> Ordering Paragraph 6 of D.06-06-063 directs that the assigned Administrative Law Judge (ALJ) consider the October 16, 2006 report in consultation with staff, and authorizes the ALJ to “take any additional steps necessary to ensure that a common approach and tool for reporting is implemented by the utilities in a timely manner.”

PG&E and SCE filed reply comments.<sup>6</sup> Energy Division subsequently met with each of the utilities individually to discuss the SPM-related issues raised in the advisory group meetings and written comments.

After considering written comments and in consultation with staff, I find that the utilities' E3 calculators still do not fully comply with the directives in D.06-06-063 with respect to the treatment of costs in the SPM tests of cost-effectiveness. Accordingly, as discussed in today's ruling, the utilities are required to treat costs in all applications of the SPM tests consistent with D.06-06-063 and today's ruling, including the calculations generated by the E3 calculator. This includes the portfolio benefit/cost metrics that the utilities will be generating using the E3 calculator for their Quarterly Reports. Until further notice, the utilities are required to post to a website their E3 calculators, import/export files, workpapers and related information discussed in this ruling to document the Quarterly Report benefit/cost metrics, beginning with the March 1, 2007 report due for fourth quarter 2006.

Today's ruling also directs the utilities to apply net-to-gross ratios consistent with the SPM, establishes a process for ensuring consistency in net-present-value calculations as recommended by Energy Division, and

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<sup>6</sup> DRA/TURN filed their comments in A.05-06-004 et al. instead of in this proceeding, as directed by Ordering Paragraph 21 of D.06-06-063. SCE filed its reply comments in A.05-06-004 et al. as well as R.04-04-025. At the direction of the Docket Office, PG&E filed its reply comments in A.05-06-004 et al., R.04-04-025 and in this proceeding. We incorporate the DRA/TURN and SCE comments into the record in this proceeding, by reference, noting that they were inadvertently filed in related energy efficiency proceedings and accepted for filing by the Docket Office at my direction.

addresses near-term quality control issues pending further consideration of the December 15, 2006 report filed in this proceeding.

## **2. Treatment of Costs in the SPM Tests of Cost-Effectiveness**

As discussed in D.06-06-063, the TRC test is the measurement of net resource benefits from the perspective of all ratepayers, and is produced by combining the net benefits of the programs to participants and non-participants. The benefits are the costs of the supply-side resources avoided or deferred. The costs included in the TRC test encompass the costs of the measures/equipment installed and the costs incurred by the program administrator.<sup>7</sup>

The only costs that are to be excluded in the TRC test are those “incentives” that are to be considered and treated as transfer payments. Consistent with the SPM definitions, D.06-06-063 specifically directs that such incentives are restricted to include “only the dollar benefits such as rebates or rate incentive (monthly bill credits) to the participating customer.”<sup>8</sup> The cancelling out of these dollar transfer payments on both the cost and benefits side of the TRC equation is illustrated in a numerical example in the decision, which is reproduced in Attachment 1 to this ruling.

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<sup>7</sup> See D.06-06-063, p. 63. As noted by that decision, the TRC test looks at the “incremental” measure cost (not the full cost) when an energy-efficient appliance or measure promoted through the program represents a replacement “on burn out” of the participant’s existing appliance/measure. For these replace or burn out installations, the measure cost is the additional (incremental) cost of the equipment/measure relative to the standard (less efficient) appliance/measure that would have been installed, without the financial incentive or outreach program. Full measure/equipment costs are only used in instances where the program causes the participant(s) to do what they would not have done anyway (or at least not in the near future, e.g., 5 years), such as replace a working air conditioner with a more efficient one.

<sup>8</sup> D.06-06-063, Ordering Paragraph 15.

Apparently, some of the utilities (for some programs) continue to treat a broader set of costs as transfer payments, thereby excluding them from the TRC calculation. These include cash payments to midstream and upstream (retailers and manufacturers) to buy-down measures with the expectation that the measures will be less expensive to customers to purchase at the stores. Energy Division also reports that direct install costs are not consistently being reported by the utilities as a program administrator cost in both the TRC and PAC test of cost-effectiveness.<sup>9</sup>

By this ruling, I direct the utilities to remove midstream and upstream incentives from the Incentives-Rebates category, which is the cost category that is treated as a transfer payment in the TRC test calculations using the E3 calculator. These are non-transfer payments based on the SPM methodology, the definitions in the policy rules for energy efficiency (Policy Rules) and the Commission's directives in D.06-06-063.<sup>10</sup> There appear to be other types of non-transfer

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<sup>9</sup> As discussed in D.06-06-063, under the PAC test, the program benefits are the same as the TRC test, but costs are defined differently to include all costs incurred by the program administrator (including financial incentives or rebates paid to anyone, including participants). The PAC test equation does not include any out-of-pocket costs incurred by participants (or on the benefit side of the equation, any benefits in the form of dollar rebates), therefore, under the PAC test no costs are excluded as "transfer payments" as they are in the TRC test in those limited instances discussed in D.06-06-063 and in the SPM.

<sup>10</sup> See Attachment 1. Payments to retailers and manufacturers are not the "dollar benefits such as rebates or rate incentive (monthly bill credits) to the participating customer" that are allowed to be treated as transfer payments in the TRC under the SPM. Moreover, the Policy Rules adopted by D.05-04-051 define "rebate", "customer" and "ratepayer" consistent with the SPM's use of these terms, as follows: (1) A rebate is a financial incentive paid to the customer in order to obtain a specific act, typically the installation of energy efficiency equipment., (2) A Customer is defined as any person or entity that pays an electric and/or gas bill to an investor-owned utility and that is the

*Footnote continued on next page*



payments that are still being treated inappropriately as transfer payments in the E3 calculators. For example, Energy Division reports that for programs with some measures that are direct install (such as paying a contractor to install compact fluorescent lamps) to correct A/C refrigerant charge or to perform maintenance such as economizer tune-ups) some of the utilities continue to treat those measure program direct install costs as transfer payments. This treatment of non-transfer costs as transfer payments in the TRC test needs to be corrected.

Ordering Paragraph 17 of D.06-06-063 also requires the utilities to book costs as “administrator costs” in situations where a direct install program does not bill or collect from the customer for any portion of the costs, for either the TRC or PAC tests of cost-effectiveness. Staff recommends that a separate line item be created for this purpose in the E3 calculator, entitled “Direct Install Cost” rather than booking these costs under “Other Admin.” I have no problem with this suggestion, as long as the costs booked under the new “Direct Install Cost” category are not treated as transfer payments in the TRC test calculations, and the utilities all book direct install costs consistently in this manner. Other types of non-transfer payments (such as midstream and upstream incentives) should be consistently booked to a cost category other than Incentives-Rebates, and for this purpose, the Other Admin cost category may be appropriate. I leave it to Energy Division, working with the E3 calculator consultants and the utilities to

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ultimate consumer of goods and services, including energy efficiency products, services or practices, and (3) Ratepayers are customers who pay for gas or electric service under regulated rates and conditions of service. See D.05-04-051, Appendix B – Common Energy Efficiency Terms and Definitions.

develop a consistent set of non-transfer payment cost categories for booking these costs in the E3 calculator, and for reporting purposes.<sup>11</sup>

Rather than requiring the utilities to go back to the E3 calculators and input files used for the 2006-2008 portfolio plans, and make the needed corrections to those input files and calculations, I believe it is much more productive to focus efforts on ensuring that the treatment of costs in the benefit/cost metrics produced for all future applications of the SPM tests of cost-effectiveness, especially the accomplishments reported for 2006-2008 portfolios in each Quarterly Report, are consistent with the directives of D.06-06-063. Therefore, the utilities should begin immediately to ensure that their E3 calculator engine and input/output files are revised to be consistent with those directives, as well as today's ruling on other E3 calculator issues. Beginning with the report for fourth quarter (due March 1, 2007) and until further notice, the utilities are required to post to a website their E3 calculator and input/output files with each Quarterly Report. The first posting (with the report for fourth quarter 2006) will include a summary of the changes made in

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<sup>11</sup> In its reply comments on the utilities' compliance submittals, SCE indicates that expenses related to direct installation for low-income energy efficiency programs are booked under the cost category of "Program Incentives" rather than "Admin Costs" or "Other Costs." See SCE's Reply Comments On the Utilities' Compliance Submittals, September 29, 2006, filed in R.04-04-025 and A.05-06-004 et al. (incorporated into the record in this proceeding by reference), p. 4. Given the confusion that the term "incentives" has caused in recent years in the application of the TRC test, these costs should now be booked as "Direct Install Costs" or some existing category of costs that will not be treated as transfer payments (I have no preference) for low-income and non-low-income program alike for evaluation and reporting purposes. Staff should work with the utilities to develop a consistent manner of booking and reporting these costs across the low-income and non-low-income energy efficiency activities.

response to today's ruling. Each posting shall also provide a clear description of how the "cumulative-to-date" benefit/cost metrics are derived from the posted E3 calculator information, as well as the other E3 calculator detail discussed under Section 5 below. The utilities shall notify the service list in this proceeding of the availability of this information with each quarterly posting.

### **3. Net-to-Gross/Free Rider Issues**

By way of background, the net-to-gross (NTG) ratio is applied to the benefits side of both the TRC and the PAC tests of cost-effectiveness to reflect the fact that some of the energy savings would have occurred anyway, without the energy efficiency program. That is, some program participants are "free riders" in the sense that they would have purchased the energy savings measure even if the program did not exist. In other words, these program participants would have purchased and installed the measure anyway, without a dollar rebate to cover a portion of the measure costs, or the offering of a "direct install" at no cost to the participant. The NTG ratio is the ratio of free riders to the total number of participants, e.g., a ratio of .80 indicates that 20% of the participants are free riders.

During the 2006-2008 portfolio planning process, staff noticed that the utilities were applying the NTG ratio to some components of TRC costs, and questioned the propriety of discounting any TRC costs in this manner. The scoping ruling for this proceeding identified this issue for Commission resolution during Phase 1, along with the design issues for an energy efficiency

risk/return incentive mechanism.<sup>12</sup> The utilities and other parties pointed out in their Phase 1 comments that the TRC test was corrected by a memo from members of the SPM working group in 1988 to adjust the “participant cost” component to reflect free riders. For reference, I’ve attached the October 7, 1988 correction memo that was also presented in Phase 1 comments and discussed during the Phase 1 workshops. I refer to this document as the “1988 SPM Correction” in today’s ruling.

The 1988 SPM Correction acknowledges that some portion of the participant costs would have been incurred anyway (by free riders that would have purchased the measure on their own) without the program being available. This document specifies that the NTG ratio should be applied “only to the participant costs and not to the utility administrative costs.” The SPM defines those costs as “all out-of-pocket expenses incurred as a result of participating in a program, plus any increases in the customer’s utility bill(s).” The SPM specifically identifies the “out-of-pocket” cost of any equipment or materials purchased by the participating customer as a participant cost. There is no reference in any version of the SPM (from the original 1983 through the most recent 2001 version) to participant costs encompassing any costs that the utility incurs in providing the program.

The Phase 1 record, which has been submitted, indicates consensus on this issue: All parties commenting on the application of the NTG ratio agree that the

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<sup>12</sup> See Assigned Commissioner’s Ruling and Scoping Memo and Notice of Phase 1 Workshops on Risk/Return Incentive Mechanism, May 5, 2006, Attachment 4 p. 6 (Issue 11).

1988 SPM Correction is the applicable approach.<sup>13</sup> No disagreement was voiced during the Phase 1 workshops this summer, when I specifically asked all parties whether there remained any differences among them in how the NTG ratio should be applied.<sup>14</sup> Staff was present at the workshops and agreed with this consensus position.

However, staff informs me that in recent discussions with PG&E about their E3 calculator compliance submittals, PG&E now prefers an approach that would reclassify “direct install” measure costs as “participant costs” for the purpose of applying the NTG ratio to the cost side of the TRC equation.<sup>15</sup>

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<sup>13</sup> See PG&E’s Pre-Workshop Written Comments and Proposal (Phase 1), June 16, 2006, pp.17-18; Pre-Workshop Comments of SDG&E/SoCalGas on Phase 1, June 16, 2006, pp. 16-17 and Attachment 9; Post-Workshop Opening Comments of SCE on Phase 1, September 8, 2006, Appendix A; TURN’s Post Workshop Comments on the Design of an Energy Efficiency Incentive Mechanism, September 8, 2006, p. 37; Pre-Workshop Comments of DRA (Phase 1), June 16, 2006, p. 23. Joint Summary Documents on Energy Efficiency Shareholder Risk/Return Incentive Mechanism Proposals, September 18, 2006, Attachment 2, p. 6.

<sup>14</sup> I specifically asked this question because the comparison exhibit prepared for the workshops summarizing the positions used slightly different terms in describing parties’ positions, even though all parties referred to the 1988 SPM Correction as the applicable approach. In particular, SDG&E/SoCalGas and SCE used the term “incremental measure cost” instead of “participant cost” in their write-up, even though the SPM correction makes no reference to the term “incremental measure cost”. When I asked whether this was an area of disagreement, it was explained to me that this reflected merely a semantics difference because the E3 calculators do not have a “participant cost” category for inputting values, and that all parties agreed that the 1988 SPM Correction should be followed.

<sup>15</sup> I note that the application of the NTG ratio that PG&E apparently now prefers was also described in the December 15, 2006 report responding to Ordering Paragraph 18 of D.06-06-063 as a nonconsensus position, even though this issue was not identified for consideration in this report by the Commission, Assigned Commissioner or ALJ. See

*Footnote continued on next page*

Apparently this approach is reflected in PG&E's E3 calculator input files submitted in response to Ordering Paragraph 17. This contradicts PG&E's formal Phase 1 comments on the issue of NTG adjustments, and also represents a departure from the SPM correction presented in Attachment 2 and discussed at the Phase 1 workshops. More specifically, PG&E filed the following comments in Phase 1 in support of the 1988 SPM Correction:

The use of free-rider or net-to-gross (NTG) adjustment has recently arisen in one context: whether the participants' cost in the total resource cost should be adjusted by a NTG ratio. The Commission's adopted approach to calculating net benefits for assessing performance combines the program administrator cost (PAC) and the total resource cost (TRC) approaches. Both the 1987 and the 2001 versions of the Standard Practice Manual (SPM) describe these tests as measuring benefits with net savings, defined in the context of the Participant Cost Test (see 2001 SPM, page 11, footnote 1). [Footnote: "That is, net savings are gross savings minus those changes in energy use and demand that would have happened even in the absence of the program."]

The PAC test "measures the net costs of a demand-side management program as a resource option based on the costs incurred by the program administrator (including incentive costs) and excluding any net costs incurred by the participant." (Footnote omitted.) Based on that purpose or intent, there is no question that the costs included in the PAC approach should include all the program administrator costs, including rebates paid to customers, with no NTG adjustments.

The free-rider or NTG issue with the TRC is less clear. First, the description of cost would lead one to believe that all costs should be included. But that does not take into account the *errata* letter distributed in 1989 by a member of the group working on the SPM.

(Footnote omitted.) Based on those *errata* some 15 years of practice ensued which did apply a NTG ratio to the participants' costs in all TRC based calculation. While the SPM is short on rationale, one can only assume that the intent was to have a methodology which looked at a program from a true net resource perspective, showing the effects of the program compared to a world in which there was no program. That approach requires that the benefits included only be those actually due to the program, and the costs only be those due to the program. Since free rider benefits would occur in the absence of the program, they were factored out by applying a NTG ratio to the benefits (to get program net savings). *Similarly, to arrive at participant costs due to the program, free rider's participant costs were factored out of the total program participant costs by applying a NTG ratio to the total participant costs. This approach was commonly used and subject to numerous opportunities for litigation over the past 15 or more years.* It provides the Commission and other stakeholders with an appropriate, consistent and useful approach for assessing a program's resource contribution. *This approach should be continued.*<sup>16</sup>

The Commission's adopted energy efficiency policy rules (Policy Rules) specifically state that program administrators and implementers are to perform cost-effectiveness analyses consistent with the indicators and methodologies included in the SPM,<sup>17</sup> and all of the utilities (including PG&E) submitted formal comments acknowledging Attachment 2 as a correction to the SPM that should continue to be followed. Moreover, as indicated above, no party presented for Commission consideration in their Phase 1 filings or during workshops an

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<sup>16</sup> PG&E's Pre-Workshop Written Comments and Proposal (Phase 1), June 16, 2006, pp. 17-18. (Emphasis added.)

<sup>17</sup> The Policy Rules were adopted by D.05-01-051 and are contained in Attachment 3 of that decision. (See Attachment 3, Rule IV.1.)

alternative approach whereby some types of utility costs (e.g., direct install costs) would be redefined as “participant costs” for the purpose of applying the NTG ratio. Nor is this the approach taken for low-income energy efficiency, where all program offerings are generally activities are generally “direct install.”

The record in Phase 1 has been submitted. If PG&E believes that it should be reopened to consider additional information concerning this issue, PG&E has the burden of: 1) demonstrating why the information was not available during the procedural schedule established for the Phase 1 filings, 2) describing the nature and source of the new information that should now be considered by the Commission, and 3) proposing a procedural schedule for providing the new information with opportunity for comment by all interested parties. If PG&E intends to make this pleading, it should do so by filing a motion with service on all parties to this proceeding, and parties will have an opportunity to comment on the motion pursuant to Rule 11.1 of the Commission’s Rules of Practice and Procedure.

Unless and until the Commission directs otherwise, however, all TRC tests of cost-effectiveness, including E3 calculators and input files, should apply the NTG adjustment only to participant costs, and not to any utility costs of the program. This means that if the utility covers all costs of the measure/installation, without the participant paying anything out-of-pocket, there will be no NTG adjustment on the cost-side of the TRC equation. On the benefit-side of the equation, the NTG adjustment should be applied to resource benefits for both the TRC and PAC tests, as required under the SPM. The utilities shall take steps immediately to ensure that all future TRC calculations apply NTG ratios as directed in this ruling, including the fourth quarter 2006



Quarterly Report benefit/cost metrics and the underlying E3 calculator and input/output files discussed above.

#### **4. Net Present Value Issues**

In its review of the E3 calculators, Energy Division staff also identified some inconsistencies in the treatment of dollar values for net-present-value (NPV) calculations performed by the E3 calculators that requires additional Energy Division review. The areas of further review include:

- The “basis” period used for the NPV calculation or, in other words, the definition of “time zero” used for the NPV formula.
- How the dollar values for cash flows that are part of the program implementation process are entered into the NPV calculation (e.g., are they entered in appropriate future dollars and discounted to the basis period?).
- Consistent use of the commission-adopted annual discount rate, particularly for NPV calculations performed in time increments shorter than annual, such as the quarterly TRC and PAC calculation within the E3 calculators.

In addressing these and other NPV-related issues that staff deems appropriate, Energy Division may solicit input from technical experts, stakeholders or formal parties to this proceeding, at staff’s discretion. Energy Division shall report back to the Administrative Law Judge(s) in this proceeding as to whether further actions are required

#### **5. Quality Control Issues**

Our experience to date with the E3 calculators makes it very apparent that an improved process is needed for the submission and review of those calculators and the input files. The Commission recognized this by directing in D.06-06-063 (Ordering Paragraph 18) that the stakeholders explore with

Commission staff ways to assure greater quality control over E3 calculators on an ongoing basis. Pursuant to that direction, a report on consensus and non-consensus recommendations was submitted on December 15, 2006. I will be working with the assigned Commissioner and Energy Division to consider these recommendations, so that appropriate quality control improvements can be implemented as soon as practicable.

In the meantime, however, based on the E3 calculator compliance filings submitted this fall, there are improvements that the utilities must make to their own internal process for generating the E3 calculations without any further delay. First, each utility needs to ensure that those individuals entering data into the E3 calculators are informed of and trained to follow Commission policy and procedures for all calculations, including those addressed by today's ruling. In addition, it is critical to ongoing quality control that each utility provides supporting documentation (workpapers) for all values reported that shows step-by-step how calculations were made to arrive at inputs for the E3 calculators used to report accomplishments. The documentation needs to be sufficient for Energy Division (or their contractors) to be able to independently reproduce all values reported from a combination of workpapers and data requests for the tracking data base and other supporting information behind all measures claimed to be installed. Going forward into accomplishment reporting and Energy Division verification of those claims, the need for complete workpapers as well as the details behind individual savings that make up the summary claims in the Quarterly Reports is essential.

For the Quarterly Report postings required by today's ruling, the utilities should work closely with Energy Division to ensure that complete information is made available on the website in the most convenient form for review. This

information must include, as a minimum, the following items for each of the four utilities:

1. A “blank” E3 calculator – a complete version of the utility calculator used to calculate the results reported in the quarterly report. This calculator must be complete with all formulas exactly as used for reporting but contain no measure input data.
2. A composite portfolio E3 calculator “import/export” file – this file is created by performing an “export” of the data from the E3 calculator as used to produce the portfolio level information for the monthly report. When this file is imported into the utility “blank” E3 calculator a reviewer would be able to perform a complete review of all data and calculation formulae used to produce the portfolio level values found in the utility quarterly report.
3. An E3 calculator “import/export” file for each program in the portfolio -- this file is created by performing an “export” of the data from the E3 calculator as used to produce the program level information for the monthly report prior to all programs being aggregated into the portfolio level calculator of item 2. When one of these files is imported into the utility “blank” E3 calculator a reviewer would be able to perform a complete review of all data and calculation formulae used to produce a particular programs’ values represented in the utility quarterly report. A reviewer would also be able to aggregate all program “import/export” files to reproduce the portfolio level values reported in the quarterly report.
4. New, augmented or corrected workpapers. Every measure for which savings is claimed must be either a Data Base For Energy Efficient Resources (DEER) value as published in the CPUC DEER website data base (version 2.01 found at <http://eega.cpuc.ca.gov/deer/>) or have a workpaper. DEER values must be referenced by their DEER Run ID. Values that are derived from DEER published values, by combining multiple DEER values into a single value or having other manipulations and/or calculations performed so as to provide the claimed savings, must have a supporting workpaper showing exactly step-by-step how the published DEER values were combined or manipulated to produce the reported values. Values that are non-DEER values must have a

supporting workpaper that shows exactly step-by-step how the reported values were calculated. If the non-DEER workpapers use assumptions, processes or software and the internal calculations or derivations of calculations performed are not fully disclosed within the workpaper, those source documents must also be posted with the workpapers.

5. Workpapers that provide a clear (step-by-step) description of how the “cumulative-to-date” benefit/cost metrics are derived from the E3 calculator information

In addition, over the longer term, clarifying or renaming the input values in the E3 calculator should serve to greatly improve consistency in the inputting of data. For example, as it has been explained to me, the calculator has a column labeled “gross incremental measure cost” (\$/unit) that is used to enter the participant costs. Apparently, this name for participant cost input values has been used for many years in TRC calculations because, up until just a few years ago, the participant paid for the measure (including installation costs) and the utility simply provided a dollar rebate or bill credit, which was treated as a transfer payment in the TRC test. Therefore, the incremental measure cost represented out-of-pocket costs by participants.

However, with the many new program delivery systems and designs in the energy efficiency portfolios today, this approach to naming participant cost input values may have outlived its usefulness. In particular, the name “gross incremental measure cost” does not clearly distinguish between costs paid for out-of-pocket by the participant and those paid for by the utility under direct install programs, which are much more prevalent today. Moreover, this name does not distinguish between installations that represent replacements “on burn out” and those that replace a working measure. As discussed in D.06-06-063 (and referenced in footnote 7 to this ruling), these different circumstances require

different cost inputs and correspondingly different resource benefit inputs. There may be other input names in the E3 calculator that should be reexamined for the purpose of improving the quality of data entry consistent with Commission policies, including the proper application of the TRC and PAC tests of cost-effectiveness.

Accordingly, I direct Energy Division to confer with E3 and other technical expertise, as staff deems appropriate, to explore whether the naming of input values in the E3 calculator should be modified to better capture the SPM cost definitions and calculation methods or other Commission directives. I will establish a schedule with Energy Division staff for this effort in consultation with them over the December 15, 2006 report on overall quality control improvements.

**IT IS RULED** that:

1. For all applications of the Standard Practice Manual (SPM) tests of cost-effectiveness conducted from this day forward, the utilities shall ensure that their calculations conform to the directives of Decision (D.)06-06-063 and today's ruling. This includes the accomplishments reported for 2006-2008 energy efficiency portfolios for fourth quarter 2006 and beyond.
2. Beginning with the March 1, 2007 report for fourth quarter 2006, and until further notice, the utilities are required to post their E3 calculator and the information required by this ruling on a website with each quarterly report of energy efficiency accomplishments (Quarterly Report). The utilities shall work closely with Energy Division to ensure that complete information is made available on the website in the most convenient form for review. At a minimum, the website postings shall include the information listed in Section 5 of this ruling. The first posting (with the report for fourth quarter 2006) shall also

include a summary of the changes made in response to today's ruling. Energy Division may request additional documentation for these postings to facilitate review and quality control of the calculations. The utilities shall notify the service list in this proceeding of the availability of this information with each quarterly posting, by serving a notice of availability pursuant to the Electronic Service Protocols attached to the Commission's order instituting this rulemaking (dated April 13, 2006) and consistent with Rules 1.9 and 1.10.

3. The utilities shall take steps immediately to ensure that all future cost-effectiveness calculations apply net-to-gross ratios as directed in this ruling.

4. As discussed in this ruling, Energy Division shall review the net-present-value calculations in the E3 calculators for possible inconsistencies and report back to the assigned Administrative Law Judge(s) as to whether further action is required.

5. As discussed in this ruling, each utility shall ensure that those individuals entering data into the E3 calculators are informed of and trained to follow Commission policy and procedures for all calculations, including those addressed by today's ruling.

6. As discussed in this ruling, Energy Division shall confer with Energy and Environmental Economics ("E3") and other technical expertise, as staff deems appropriate, to explore whether the naming of input values in the E3 calculator should be modified to better capture the SPM cost definitions and calculation methods or other Commission directives. A schedule for this effort shall be established in consultation with Energy Division staff on other quality control improvements discussed in the December 15, 2006 report.

7. This ruling shall be served on the service list in this proceeding and Rulemaking 04-04-025.

Dated December 21, 2006, at San Francisco, California.

/s/ JANET A. ECONOME for  
Meg Gottstein  
Administrative Law Judge

### **INFORMATION REGARDING SERVICE**

I have provided notification of filing to the electronic mail addresses on the attached service list.

Upon confirmation of this document's acceptance for filing, I will cause a copy of the Notice of Availability to be served upon the service list to this proceeding by U.S. mail. The service list I will use to serve the copy of the Notice of Availability is current as of today's date.

Dated December 21, 2006, at San Francisco, California.

/s/ JOYCE TOM

Joyce Tom

### **N O T I C E**

Parties should notify the Process Office, Public Utilities Commission, 505 Van Ness Avenue, Room 2000, San Francisco, CA 94102, of any change of address to insure that they continue to receive documents. You must indicate the proceeding number on the service list on which your name appears.